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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/756,858      | 01/10/2001  | Bae Guen Kang        | 0465-0801P-SP       | 6037             |

2292 7590 05/06/2005

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| EXAMINER |
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ONUAKU, CHRISTOPHER O

|          |              |
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| ART UNIT | PAPER NUMBER |
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2616

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/756,858

Applicant(s)

BAE GUEN KANG

Examiner

Christopher O. Onuaku

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-17 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,8,10,11,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 3,5-7,9,12,13&20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/10/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### Abstract

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract contains the phrase "... is disclosed", which can be implied. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,2,4,8,10,11,18&19 are rejected under 35 U.S.C. 102(e) as being anticipated by Sezan et al (US 6,236,395).

Regarding claim 1, Sezan et al disclose a system for managing audiovisual information, including a system for audiovisual information browsing, filtering, searching, archiving, and personalization, comprising:

a) a broadcast data synchronization and transmission system which produce live broadcast program to be broadcast and XML information for the live broadcast program, combining the XML TAG information with the produced broadcast program, and transmitting the combined data of MPEG transport stream to a broadcasting network (see Fig.1&2; program 38 which is processed in such a way as to be analyzed using the audio visual system 16, when received by audiovisual system 16, wherein the audiovisual system 16 includes the video, image, and/or audio information 10, the system (device) 12 and user information 14, wherein separate description scheme for the program 10 (see program description scheme18), the system 12 (see system description scheme 22) and the user 14 (see user description scheme 20) are produced and combined together to provide an interactivity; col.4, line 3 to col.7, line 50). An example of the description schemes can be in XML (see col.14, lines 40-45). In addition description schemes can handle programs coming from such devices supporting an MPEG-7 description, for example (see col.13, lines 8-25);

b) a receiving system which receives the MPEG transport stream from the broadcasting network, simultaneously records and plays back the MPEG transport

stream, and reads information required for user video indexing by analyzing the XML tag received in synchronization with specified sections of the transport stream (see Fig.2 and system 16 which receives program 18 with the signification portions of a typical audiovisual environment as descried in such a way that when program 18 is received by the system 16, the system 16 can analyze the program 38 using the program, user and/or system description scheme. The program 38 may originate at any suitable source such as broadcast television, cable television, satellite television, and so on ; col.7, line 50 to col.9, line 26) The audiovisual program analysis 42 performs an analysis of the received programs 38 to extract and provide program related information (descriptors) to the descriptors to the description scheme generation module 44.

c) simultaneous recording and playback of MPEG transport stream (see col.10, lines 31-37).

Regarding claim 2, Sezan et al disclose:

a) a contents production and synchronization unit which produces, in real time, the XML tag information and provides live broadcast program to be broadcast (see claim 1 discussions and the description schemes- i.e., the program description scheme 18, the system description scheme 22 and the user description scheme 20, wherein the different description schemes may be combined to provide interactivity; and wherein the descriptions schemes may be in XML;

b) a data transmission unit combines the XML tag information from the contents production ans synchronization unit with the produced broadcast program, and

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transmits the combined data as MPEG transport stream ( see claim 1 discussions, including wherein the transmitted program 38 is received by the system 16, and wherein the program analysis module 42 of system 16 performs an analysis of the received program 38, which includes the description schemes (which may be in XML).

Regarding claim 4, Sezan et al discloses:

a) a data encoder which combines the XML tag information with the produced broadcast program to be transmitted (see claim 1 above, including the combining together of the separate description scheme describing the program 10, the user 14 and the system 12 to provide interactivity; col.4, lines 20-40), wherein the claimed encoder is inherent in Sezan et al in order to efficiently combine the separate description schemes; and

b) an MPEG stream transmitter which transmits to the broadcast network the combined data from the encoder (see claim 1 discussions above, including the transmission of the program 38 to be received by the system 16, and wherein the description schemes can handle programs coming from such devices supporting an MPEG-7 description, for example (see col.13, lines 8-25);

Regarding claim 8, the claimed limitations of claim 8 are accommodated in the discussions of claim 1 above.

Regarding claim 10, the claimed limitations of claim 10 are accommodated in the discussions of claim 4 above.

Regarding claim 11, the claimed limitations of claim 11 are accommodated in the discussions of claim 1 above.

Regarding claim 18, the claimed limitations of claim 18 are accommodated in the discussions of claims 1&8 above.

Regarding claim 19, the claimed limitations of claim 19 are accommodated in the discussions of claims 1&11 above.

***Allowable Subject Matter***

5. Claims 14-17 are allowable over the prior art of record.
6. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 14, the invention relates to broadcast programs, including a system and method for synchronizing video indexing between an audio/video signal and data during recording and playback of a broadcast program.

The closest reference Sezan et al (US 6,236,395) disclose a system for managing audiovisual information, including a system for audiovisual information browsing, filtering, searching, archiving, and personalization.

However, Sezan et al fail to explicitly disclose a receiving system in a system for synchronizing video indexing between an A/V signal and data for a broadcast program, where the system further comprises a media control unit which synchronizes an object file among the MPEG transport stream stored in the storage unit and controls an operation of a video cartridge recorder, and where the object file is a combination of an MPEG file and the XML file, a synchronization decomposition unit which searches for synchronized positions of specified section of the MPEG stream based on the outputs from the XML parser unit and the media control unit, and a metadata index unit which systematically stores information output from the sync decomposition unit.

7. Claims 3, 5-7,9,12,13&20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 3, the invention relates to broadcast programs, including a system and method for synchronizing video indexing between an audio/video signal and data during recording and playback of a broadcast program.

The closest reference Sezan et al (US 6,236,395) disclose a system for managing audiovisual information, including a system for audiovisual information browsing, filtering, searching, archiving, and personalization.



However, Sezan et al fail to explicitly disclose a system for synchronizing video indexing between an A/V signal and data for a broadcast program, where the system further comprises a stream unit which detects GOP positions of an MPEG stream to be broadcast on a TV, a shot/scene unit which sets and marks the XML tag in the corresponding GOP positions detected by the stream unit, an XML unit which synchronizes the marked XML tag with the MPEG stream to broadcast, and a generation unit which generates and outputs the XML tag information based upon the result from the XML unit.

Regarding claim 5, the invention relates to broadcast programs, including a system and method for synchronizing video indexing between an audio/video signal and data during recording and playback of a broadcast program.

The closest reference Sezan et al (US 6,236,395) disclose a system for managing audiovisual information, including a system for audiovisual information browsing, filtering, searching, archiving, and personalization.

However, Sezan et al fail to explicitly disclose a system for synchronizing video indexing between an A/V signal and data for a broadcast program, where the system further comprises a media control unit which synchronizes an object file among the MPEG transport stream stored in the storage unit and controls an operation of a video cartridge recorder, and where the object file is a combination of an MPEG file and the XML file, a synchronization decomposition unit which searches for synchronized positions of specified section of the MPEG stream based on the outputs from the XML

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parser unit and the media control unit, and a metadata index unit which systematically stores information output from the sync decomposition unit.

Regarding claim 9, the invention relates to broadcast programs, including a system and method for synchronizing video indexing between an audio/video signal and data during recording and playback of a broadcast program.

The closest reference Sezan et al (US 6,236,395) disclose a system for managing audiovisual information, including a system for audiovisual information browsing, filtering, searching, archiving, and personalization.

However, Sezan et al fail to explicitly disclose a system for synchronizing video indexing between an A/V signal and data for a broadcast program, where the system further comprises a stream unit which detects GOP positions of an MPEG stream to be broadcast on a TV, a shot/scene unit which sets and marks the XML tag in the corresponding GOP positions detected by the stream unit, an XML unit which synchronizes the marked XML tag with the MPEG stream to broadcast, and a generation unit which generates and outputs the XML tag information based upon the result from the XML unit.

Regarding claim 12, the invention relates to broadcast programs, including a system and method for synchronizing video indexing between an audio/video signal and data during recording and playback of a broadcast program.

The closest reference Sezan et al (US 6,236,395) disclose a system for managing audiovisual information, including a system for audiovisual information browsing, filtering, searching, archiving, and personalization.

However, Sezan et al fail to explicitly disclose a system for synchronizing video indexing between an A/V and data for a broadcast program, where the system further comprises a media control unit which synchronizes an object file among the MPEG transport stream stored in the storage unit and controls an operation of a video cartridge recorder, and where the object file is a combination of an MPEG file and the XML file, a synchronization decomposition unit which searches for synchronized positions of specified section of the MPEG stream based on the outputs from the XML parser unit and the media control unit, and a metadata index unit which systematically stores information output from the sync decomposition unit.

Regarding claim 20, the invention relates to broadcast programs, including a system and method for synchronizing video indexing between an audio/video signal and data during recording and playback of a broadcast program.

The closest reference Sezan et al (US 6,236,395) disclose a system for managing audiovisual information, including a system for audiovisual information browsing, filtering, searching, archiving, and personalization.

However, Sezan et al fail to explicitly disclose a method for synchronizing video indexing between an A/V signal and data for a broadcast program, where the method further comprises reading an XML tag from the MPEG transport stream and detecting a

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time offset from the XML tag, converting the detected time offset to a file offset, generating GOP index file from the MPEG transport stream, reading a GOP index file and comparing the GOP index file to the file offset, and storing the GOP index file and the XML tag if the file offset is equal to the GOP index file, otherwise, reading a next GOP index file and compared to the file offset until a GOP index file which matches the file offset is found for storage with the XML tag.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ozzie et al (US 6,640,241) teach computers interconnected for communication over a network such as the Internet and intranets, including a distributed computer-based system for coordinating and otherwise maintaining data pursuant to a distributed data model.

Shteyn (US 6,618,764) teaches a system and method for enabling networks of possibly different software architectures, such as HAVi home network and a Home API-based or a JINI-based home network, to cooperate.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher O. Onuaku whose telephone number is (571) 272-7379. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 757-272-7375. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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PRIMARY EXAMINER